

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 06169998 A

(43) Date of publication of application: 21.06.1994

(51) Int. Cl. A61N 1/39

(21) Application number: 04260489
(22) Date of filing: 17.08.1992
(30) Priority: 16.08.1991 US 91 746430

(71) Applicant: VENTRITEX INC
(72) Inventor: FAIN ERIC
PLESS BENJAMIN
HARDAGE MICHAEL

(54) METHOD AND DEVICE FOR REGULATING AUTOMATIC PULSE DURATION BASED ON IMPEDANCE FOR IMPACT ELIMINATIVE DEFIBRILLATION

(57) Abstract:

PURPOSE: To improve safety and reliability of defibrillation by sending a defibrillation impact into a heart by using a current pulse width setting way in a diagnosis of arrhythmia, and constituting so as to automatically regulate a pulse amplitude based on an impedance of the heart following the given defibrillation impact.

CONSTITUTION: A waveform analyzing part 71 in the integrated circuit(IC1) 70 monitors a heart rhythm and discriminate arrhythmia from a normal sine- waved rhythm, and when diagnosed it as an arrhythmia, a defibrillation impact impresses onto the heart as to either one of supraventricular tachycardia, atrial defibrillation and ventricle tachycardia or ventricle fibrillation by using a current pulse width setting by the integrated circuit(IC2) 30 through a switch provided in a high volt-

age transmission block 47. Next, an impedance of high voltage system after the defibrillation impact is given, is measured and an optimum pulse width relating to a measured impedance value is selected in reference to a list of proposed pulse duration, and the result is used as a proposed pulse width relating to the next defibrillation impact.

COPYRIGHT: (C)1994,JPO

